

**Decision Notice
and
Finding of No Significant Impact
for the
ENVIRONMENTAL ASSESSMENT
for the
Proposed Amendment to the
Green Mountain National Forest
Land and Resource Management Plan for
Threatened, Endangered, and Sensitive Species

USDA Forest Service
Green Mountain and Finger Lakes National Forest**

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Introduction

It is my decision to amend the *Green Mountain National Forest Land and Resource Management Plan* (Forest Plan) by updating the Forest-wide standards and guidelines, resource protection objectives, and the monitoring section of the Forest Plan, as described in Alternative 3 of the *Environmental Assessment for the Proposed Amendment to the Green Mountain National Forest Land and Resource Management Plan for Threatened, Endangered, and Sensitive Species* (TES EA; January, 2001). Alternative 3 incorporates into the Forest Plan new information about the potential impacts of forest activities on threatened, endangered, and sensitive (TES) species, including Terms and Conditions found in the *Biological Opinion on the Effects of the Land and Resource Forest Management Plan and other Activities on Threatened and Endangered Species in the Green Mountain National Forest and Incidental Take Statement* issued by the U.S. Fish and Wildlife Service on February 16, 2000.

The decision also adds to the Forest Plan new information regarding the conservation of sensitive species, including additional resource protection objectives, monitoring information, and clarification of existing Forest Plan direction for protecting sensitive species, based on a recent update of the Regional Forester's Sensitive Species (RFSS) list on February 29, 2000.

Although Appendices 6-9 are attached to this Decision Notice (DN), they are not appended to the DN but to the TES EA itself. These appendices were created after the initial publication of the TES EA, and serve as supplementary information to the TES EA itself, and not this DN. Thus our reason for numbering the Appendices 6-9, as this displays a numerical continuum with the existing appendices to the TES EA.

Background

U.S. Fish & Wildlife Service Consultation and Biological Opinion

In January of 1986, formal consultation with the U.S. Fish & Wildlife Service (FWS) was completed for the newly developed Green Mountain National Forest (GMNF) Forest Plan. Two species were addressed: the American peregrine falcon (*Falco peregrinus anatum*) and Indiana bat (*Myotis sodalis*). At that time, the FWS determined that consultation was not required for the Indiana bat, as it was not known to occur on the GMNF.

Continuing research and inventory of TES species, as well as refinement of our knowledge of these species' habitat requirements, prompted the GMNF to take another look at the potential effects of continued implementation of the existing Forest Plan. During the summer of 1999, the Forest prepared a Biological Assessment (BA) evaluating the effects of ongoing management practices and anticipated implementation of the Forest Plan on six species that are federally threatened, endangered or proposed for listing. A majority of this new information was related to Indiana bat, and was presented in the BA, dated August 27, 1999. On September 21, 1999 the GMNF requested that the FWS initiate formal consultation on the Forest Plan in an effort to assess potential adverse effects on the Indiana bat as a consequence of management activities on the GMNF.

As required under the Endangered Species Act of 1973 (ESA), the FWS reviewed the BA, and on February 16, 2000, issued a Biological Opinion (BO) and conference report addressing the continued implementation of the Forest Plan. The BO specifically addressed GMNF management for the Indiana bat, and concurred with determinations for the other five species (American peregrine falcon, bald eagle [*Haliaeetus leucocephalus*], Eastern cougar [*Felis concolor cougar*], gray wolf [*Canis lupus*], and Canada lynx [*Lynx canadensis*]). This BO contains 17 specific actions (Terms and Conditions) the GMNF is required to implement that are designed to minimize the level of incidental take identified for the Indiana bat. These actions are divided into two time “categories”: (i) actions throughout the year, and (ii) actions during the non-hibernation periods. The BO also contains a listing of discretionary activities, identified as Conservation Recommendations, that further conservation of this species. Incidental take is defined as harassing, harming, pursuing, hunting, shooting, wounding, killing, trapping, capturing or collecting, or attempting to engage in any such conduct. A full listing of the Terms and Conditions and Conservation Recommendations can be found in the BO (USDI 2000).

The FWS concurred with the GMNF BA determination that implementation of the Forest Plan will not have an effect on the American peregrine falcon, bald eagle, Eastern cougar, or gray wolf. Therefore, these species are not further addressed in this amendment.

The Canada lynx was recently federally listed as a threatened species. In its February 16, 2000 BO (issued prior to the listing of lynx) the FWS concurred that continued implementation of the Forest Plan is not likely to jeopardize the lynx due to a lack of current or historically important habitat as well as no current or recent historical records of the species on the Forest. Subsequent discussions with the FWS and additional analysis of potential lynx habitat resulted in a determination that there are no areas meeting the quantity or quality of habitat necessary to support lynx (Burbank 2000). Therefore, we will not address any changes to management direction for Canada lynx in this amendment. Should additional information become available changing this determination we will address it at that time.

Efforts to gain new information and enhance our knowledge of the presence of Indiana bat and other woodland bats and their habitat requirements has prompted the GMNF to conduct bat monitoring efforts during the Years 1999, 2000 and 2001. Mist netting for bats on the GMNF during 1999 and 2000 yielded no discovery of Indiana bats. During Spring 2001, an interagency team of FWS, GMNF and State of New York and Vermont biologists used radio tagging and telemetry techniques to follow Indiana bats from their hibernacula, in eastern New York, to summer habitat on private lands in the Champlain Valley, west of the GMNF. Subsequent mist netting and additional radio tagging during Summer 2001 at roost trees in the Champlain Valley led to tracking a single male Indiana bat to a roost tree located along the western boundary of the GMNF in East Middlebury. Based upon this new information, the Forest Service, on July 26, 2001, chose to verify with the FWS the validity of the GMNF August 27, 1999 BA as well as the findings of the FWS February 16, 2000 BO. On August 22, 2001 the FWS responded by stating that they believed the findings of the original BA and their BO were still valid (Appendix 9 of TES EA, attached to DN). In this letter, it is stated that the terms and conditions originally written as part of the BO are valid, and there are no known additional measures that can or should be taken to minimize incidental take of Indiana bats.

Regional Forester's Sensitive Species List Update

The USDA Forest Service has a responsibility to avoid trends towards federal listing under the ESA, and to maintain species viability in the planning area under the National Forest Management Act (NFMA). When a species occurs within the proclamation boundary of a National Forest, and its population viability is perceived to be at risk, the species is designated as "sensitive" by the Regional Forester and is then included on a list of such species known as the Regional Forester's Sensitive Species list. Their subsequent management must be consistent with responsibilities noted above under the ESA and NFMA. Agency policy in Forest Service Manual (FSM) 2670, in addition to directing the listing of such species by each region, directs the development of management objectives and management practices for sensitive species to achieve these ends.

On February 29, 2000, the Regional Forester designated 666 species as sensitive in the Eastern Region, updating the March 8, 1994 RFSS list. This update incorporates new information and designation criteria outlined in a regional supplement to FSM 2670 (Region 9 Supplement FSM 2670-2000-1). To update the RFSS list, biologists and botanists from the Forest Service, other state and federal agencies, academic institutions, and non-governmental organizations from across the region screened more than 4000 species of plants and animals perceived to be at risk. The screening resulted in a net increase across the Region from 202 species in 1994, to 666 species in 2000. The Eastern Region maintains the Region-wide list at the following website: http://www.fs.fed.us/r9/wildlife/tes/tes_r9_regforesterslist.htm.

The GMNF evaluated well over 200 plant and animal species as part of this process (USDA 2000b). Species evaluated included all species listed in the Forest Plan as sensitive or species of concern. It also included species on the State of Vermont's threatened, endangered, or rare lists, as well as others identified by concerned citizens. Forest Service biologists, in cooperation with the Vermont Nongame and Natural Heritage Program and other biologists familiar with these species, conducted the evaluation process. As a result, the GMNF documented 87 species with occurrences within the GMNF proclamation boundary that we consider at risk (Table 3 of the TES EA; see also Table 5 in app. 2 of the TES EA). This compares with 18 species for the 1994 RFSS list. The Forest Plan, approved in 1987, includes 8 species proposed as sensitive (the first RFSS list was released after the Forest Plan was approved), and 71 additional species as forest "species of concern". As species of concern were also evaluated for possible RFSS listing, it became clear that many of these species had no current and often no historic occurrences on the GMNF, or did not have suitable habitat on the Forest. Consequently, those species with no current occurrences or reasonable expectation of future occurrence are proposed for removal from the Species of Concern list.

During the summer and fall of 2000, a programmatic biological evaluation (BE) of the Forest Plan for conservation and management of RFSS was prepared, which evaluated the effects of implementation of the Forest Plan on these species (USDA 2000c). This programmatic BE determined that there would be no impact to species not known or likely to occur on the GMNF; that impacts to species known or likely from, but not identified as sensitive for, the GMNF would not lead to loss of viability or trend towards federal listing; and that impacts to those species identified as RFSS for the GMNF would also not lead to loss of viability or trend

towards federal listing. However, recommendations were made in this programmatic BE to strengthen the Forest Plan, which are included in the proposed amendment.

Public Involvement

My interdisciplinary team of resource specialists and I invited participation throughout the amendment process in a number of forums. The Amendment was listed in the GMNF Schedule of Proposed Actions (a quarterly publication that provides the first official notice to the public of upcoming project analyses) for the periods of January 1-March 31, 2000 and April 1-June 30, 2000. Updates to this project's timeline were included in quarterly updates to the Schedule since the original announcement.

On May 10 of 2000, a letter describing the proposed Forest Plan amendment was sent to approximately 1,082 individuals, organizations, county governments, and federal and state agencies who had previously indicated an interest in management of the GMNF. Comments on the proposed amendment were requested by June 14, 2000. Nine letters were received from various individuals and organizations. Comments submitted during scoping are displayed, along with our responses, in the TES EA (Appendix 1 – List of Public Comments); comments received that generated issues and alternatives for the TES EA analysis are displayed on pages 6-21 of the TES EA.

Following scoping and preliminary alternative development, the proposed alternatives were sent in August of 2000 by our Forest Biologist to approximately 22 Indiana bat specialists, including staff from the FWS, the State of Vermont and New York, experts and enthusiasts from non-profit organizations such as the Vermont Institute of Natural Science and Forest Watch, and various experts from academia, such as the University of Vermont and Middlebury College. The purpose of asking for review of the preliminary alternatives was to identify any additional scientific information that may need to be incorporated into our alternatives. Three comments were received, and none of them called for any modifications to the alternatives.

After the final alternative development and effects analysis were completed, I decided to offer a voluntary 30-day public review and comment period to make sure we had addressed all concerns. This review period was held between January and February 2001. Twenty-six individuals or organizations responded during this comment period, and an additional 138 individuals responded using a form letter prepared by Forest Watch. The comments and our responses to them are documented in Appendix 6 of the TES EA, attached to this DN.

During the months of March and May 2001 I met with representatives from 5 environmental organizations and the Vermont Forest Products Association, at their request, to provide further clarification and information regarding this proposed amendment. Following those meetings, I decided additional information regarding the effects of the proposal on Management Indicator Species (MIS) should be made available. Although MIS was addressed in the analysis, I felt additional clarification would help to address concerns that were raised by some members of the public. The additional information was mailed to those who commented on the TES EA, as well as to any other known interested publics, on June 22, 2001 for a 30-day comment period, which ended on July 24, 2001. One response letter was received. As a

result of the comments made in that letter, we have added more information to that originally sent out, which is displayed in Appendix 7 of this DN.

I would also like to note here that concerns of some publics with the overall MIS program, as described on pages 6-7 of the TES EA, are being addressed in a report referred to as the *Green Mountain and Finger Lakes NFs' MIS Program Action Plan* (currently in draft form - see project file). Again, as we have consistently reiterated throughout the TES EA, and in our response to TES EA comments, the programmatic issues identified with the MIS program are neither part of the purpose and need of the TES EA, nor are they part of the rationale for this decision, which is to conserve TES species.

Decision

My decision is to adopt Alternative 3 (pp. 15-16 of TES EA), with some additions and modifications, as a result of the 30-day public comment period held between January and February of the 2001. To address Indiana bat conservation, Alternative 3 is comprised of the 17 terms and conditions outlined in the FWS BO designed to minimize the level of incidental take (refer to the "Background" section of this DN for more information), additional conservation measures as recommended in the BO, and additional direction based on public comments. To address sensitive species conservation, Alternative 3 reorganizes and updates the existing information in the Forest Plan; adds resource protection objectives, monitoring actions, and an additional standard and guideline; removes the current list of "Protected Species" from the Forest Plan and requires the list to be updated annually in our yearly monitoring and evaluation reports; and also incorporates additional direction as a result of the 30-day public comment period.

The changes resulting from Alternative 3 will modify the existing Forest Plan in four main areas; in the "Forest-wide Standards & Guidelines" section (chapter IV), the "Resource Objectives" section (page 4.10), the "Activities and Outputs to be Monitored" section (appendix C), and the "Endangered, Threatened, and Potentially Sensitive species; Other Species of Concern" section, (appendix E). The actual changes to the Plan are reflected below. The additions and modifications that were derived from the 30-day public comment period on the TES EA are highlighted.

The changes are organized by the sections of the Forest Plan that would be modified as a result of this amendment. Existing plan direction is shown in plain text in quotations; existing text to be removed is shown with a ~~strike-through~~; text to be added is shown in **bold text**. The proposed changes in organization and clarification are also summarized below. Explanatory text is in italics.

Changes in Standards and Guidelines Specific to Indiana Bat

The definition for "Den Tree" on page 4.31 would be amended to the following language:

"DEN TREE - A live **or dead** tree ~~at least 15" dbh of any diameter~~ containing a natural cavity **or exfoliating bark** used by wildlife for nesting, brood rearing, hibernating, **roosting**, daily or seasonal shelter and escape ~~from predators.~~"

An additional Standard and Guideline would be added to as item “i” under “B, - Wildlife Reserve Trees” on page 4.33:

- i. All shagbark hickory trees will be reserved, unless they pose direct threat to human health and welfare.**

Direction for den trees (found on page 4.33 under B.11) would be amended to include:

- c. Reserve potentially suitable bat roosting trees; trees that exhibit exfoliating bark (e.g., shagbark hickory, trees with sloughing bark), either dead or alive and greater than 4” dbh. Higher quality potential bat roost trees include: shagbark hickory; older sugar maple and yellow birch; dead sugar maple, red maple, white ash and American elm.**
- d. Protect all known Indiana bat roost trees on the GMNF until such time as they no longer serve as roost trees (e.g., loss of exfoliating bark or cavities, blown down or decayed).**

On page 4.32, under item B.9, the following would be added as items d and e, and the current “d” changed to “e”, etc.:

- d. Protect 1/3 of all large diameter (\geq 12 inches dbh) post-harvest snags by retaining live residual trees adjacent to these snags. Such reserve trees shall be located in groups and along intermittent drainages to provide foraging corridors into harvested areas, and where available, shall be Class 1 or Class 2 trees (as identified by Romme et al. 1995), or other trees exhibiting or likely to develop characteristics preferred by Indiana bats (e.g., exfoliating bark). This standard applies to the non-hibernation period only, which is from May 15 through August 30, except near hibernacula where fall swarming may occur through September into October.**
- e. Design skid trails to avoid the need to fell suitable roost trees (as identified by Romme et al., 1995). This standard applies to the non-hibernation period only, which is from May 15 through August 30, except near hibernacula where fall swarming may occur through September into October.**

On page 4.32, under item B.9.h, the following would be added as item 1, and the current “1” changed to “2”, etc.:

- 1. Retain 5 trees of suitable roosting quality per acre harvested defined as: hard snags over 9” DBH, live trees with exfoliating bark, den trees (>15” DBH with cavity opening), yellow birch and red maple >26” DBH considered "cull" or unacceptable growing stock. When possible, configure trees with roosting qualities in clumps along the edges of openings or riparian corridors.**

The following would be added to page 4.86 as item “E”, under Public Health:

- E. In the event that it becomes absolutely necessary to remove a known Indiana bat roost tree, the U.S. Fish and Wildlife Service (FWS) shall be consulted and such a removal will be scheduled during the hibernation season. Trees identified as immediate threats to public safety may be removed at any time following consultation with the FWS.**

Add the following to page 4.34 as item 1 under “Endangered and Threatened Species” and move current item 1 (“Peregrine Eyries”) to the “Regional Forester’s Sensitive Species” section and make it item 2:

1. Indiana Bat

a. Hibernacula

- **Determine an area of influence for an occupied Indiana bat hibernaculum that is on or adjacent to lands managed by the GMNF. The area of influence will be an approximate five-mile radius centered on the hibernaculum unless it is determined, based on best science available, that a larger radius is necessary.**
- **In cooperation with the FWS and the Vermont Department of Fish & Wildlife, develop a management strategy on or before February 16 of 2002 that will minimize impacts on Indiana bats occurring on lands managed by the GMNF within the area of influence for all occupied Indiana bat hibernacula on or adjacent to the GMNF.**
- **Consider occupied Indiana bat hibernacula as smoke-sensitive areas when planning for prescribed burns to be conducted from October to May. If hibernacula are in the vicinity of the area proposed for burning, wind direction, speed, mixing height, and transport winds will be considered to minimize drifting in or near occupied hibernacula.**
- **Newly located bat hibernacula will be assessed for potential threats to all species of bats utilizing respective sites. Each hibernaculum will have its own, specifically designed management plan developed and implemented to insure continued bat use and protection. Each management plan may or may not include management direction on land adjacent to the hibernaculum. Whether or not management direction would be applied to lands adjacent to the hibernaculum would be dependent on further analysis, such analysis taking into account habitat relationships, landownership patterns and any conflicts with established uses.**
- **Strive to acquire private lands with known and/or formerly occupied hibernacula from willing sellers.**

b. Maternity Sites

- If monitoring activities result in the discovery of maternity sites on the GMNF, roost trees used by a maternity colony will be protected by establishing a zone centered on the maternity roost site. The actual area will be determined by a combination of topography, known roost tree locations, proximity to permanent water and a site-specific evaluation of the habitat characteristics associated with the colony. Protective measures shall be established by developing a management strategy, in cooperation with the FWS and the Vermont Department of Fish & Wildlife, immediately upon discovery.

c. Further Consultation

- If the Forest Service determines that activities on a project level are likely to adversely affect the Indiana bat, further consultation will be necessary.
- Formal consultation must be reinitiated if an individual project, or if the annual projected total of proposed projects, will result in exceeding the total of 300 acres annually affected by tree removal or disturbance during the non-hibernation season. However, site-specific projects proposed for the non-hibernation season may be surveyed for Indiana bat according to FWS protocols. If Indiana bats are not detected, it will be assumed that bats may be present in such low numbers that the project is not likely to adversely affect the Indiana bat. In this case, project acres will not be included in the annual allowable treatment of 300 acres.

d. New Information

The Forest Service & Fish & Wildlife Service recognizes the limitations on available Indiana bat information. The following procedures will serve to gather new information:

1. Habitat use at all sites where Indiana bats are documented on the GMNF should be characterized and quantified at both the local and landscape levels.
2. The Forest Service will provide the FWS with compliance reports indicating the project-specific conditions and an effects analysis for all projects that may affect the Indiana bat.
3. Information about the number of acres of trees harvested during the non-hibernation season must be monitored on an annual basis and shall be provided to the New England Field Office of the FWS no later than April 1 following the previous year's activities.

4. Care must be taken in handling dead specimens of listed species that are found in the project area to preserve biological material in the best possible condition. In conjunction with the preservation of any dead specimens, the finder has the responsibility to ensure the evidence intrinsic to determining the cause of death of the specimen is not unnecessarily disturbed. The finding on dead specimens does not imply enforcement proceedings pursuant to the ESA. The reporting of dead specimens is required to enable the FWS to determine if take is reached or exceeded and to ensure that the terms and conditions are appropriate and effective. Upon locating a dead, injured, or sick specimen of an endangered or threatened species, prompt notification must be made to the U.S. Fish & Wildlife Service's Essex Junction Division of Law Enforcement, 11 Lincoln Street, Room 105, P.O. Box 649, Essex Junction, Vermont 05453 (telephone: 802-879-1859), or the Region 5 Division of Law Enforcement, 300 Westgate Center Drive, Hadley, Massachusetts 01035-9589 (telephone: 413-253-8343).

e. Enhancing Knowledge

- In cooperation with the FWS and the Vermont Department of Fish & Wildlife, develop a plan to assess the number of suitable roost trees and the amount of preferred foraging habitat available to the species. Monitoring efforts should be centered within five miles of all known occupied Indiana bat hibernacula, within $\frac{3}{4}$ miles of any Indiana bat maternity colony or roost tree used by a male Indiana bat, and at selected sites (pre- and post-harvest).
- Provide training for appropriate GMNF employees on bats (including the Indiana bat) occurring on the GMNF. Training should include bat identification, biology, habitat requirements, and sampling techniques (including instructions on applicability and effectiveness of using mist net surveys vs. Anabat detectors to accurately determine the presence of various bat species). The proper training of GMNF biologists on bat identification and reliable methods for counting roosting bats will enable the Forest Service to monitor the status of the species.
- Develop an outreach program specifically directed towards northeastern woodland bat species and their conservation needs. The program might include the development of a slide show, interactive display, and presentations or activities suitable for all ages of the public.

Add the following to page 4.86, under item A (Prescribed Fires) as item 4:

- 4. Prior to the employment of any prescribed fire, provide the FWS's New England Field Office with the opportunity to review burn plans that could potentially affect Indiana bats.**

Changes in Standards and Guidelines Specific to TES Species

Appendix 3 of the TES EA displays how the text of the Forest Plan would change in appendix E and the "Wildlife and Fish" standards and guidelines to reflect the reorganization and clarification of information regarding TES species. This appendix was prepared based on the proposed action, and will be modified to reflect the changes outlined in Alternative 3 and its modifications.

All general and species-specific management direction for RFSS and species of concern will be moved from appendix E into the "Forest-wide Standards & Guidelines" section of the Forest Plan (chapter 4). What will remain in appendix E will be information on the different protected classes.

The Wildlife and Fish Standards and Guidelines structure in chapter 4 of the Forest Plan will be modified by creating three sections: Federally Listed Endangered, Threatened, and Proposed Species; Regional Forester's Sensitive Species; and Forest Species of Concern, and by placing the direction for these species in the appropriate categories.

The proposal eliminates the Species of Uncertain Occurrence list from appendix E, and replaces it with the following standard and guideline on page 4.36, section F:

Species of concern to us may not presently be known to occur on the National Forest. If these species are encountered, they will be treated according to our general standards and guidelines for sensitive species until the evaluation process for inclusion into the Regional Forester's Sensitive Species list is complete.

Changes Specific to Appendix C, Activities and Outputs to be Monitored

Amend page 5.03 to reflect monitoring requirements of the BO by changing the second sentence of the fourth paragraph to read:

"We have listed the monitoring which we would like to accomplish, as well as the monitoring frequency, ~~and~~ expected reliability, and the terms and conditions of the 2/16/00 Biological Opinion from Fish & Wildlife Service, which requires monitoring for Indiana bat (Appendix C)."

Another paragraph following the one above would also be added on page 5.03:

A plan delineating a monitoring protocol for Indiana bat should be developed in cooperation with the FWS and the Vermont Department of Fish & Wildlife and shall be completed on or before 2/16/02.

The following items would be added to Part 1 of the table in appendix C, page C.04:

NFMA Requirement	Purpose of Monitoring	Item Monitored	Unit of Measure	Frequency of Measure	Expected Precision	Expected Reliability
219.19(a)(7) Indiana bat Terms and Conditions	Determine the following:	Bats detected on the Forest using nets, electronic detectors and radio-telemetry.	Number of bats and habitat variables	Annual	Moderate	Moderate
	a) their presence or absence, b) their habitat use and movements during the non-hibernation season, c) the location of any potential maternity colonies, d) the major foraging areas used by male Indiana bats near occupied hibernacula during the non-hibernation season.					
	Comply with incidental take requirements	The number of acres of trees harvested during the non-hibernation season must be monitored on an annual basis.	Acres	Annual	High	High
		Populations in hibernaculum	Number and species of hibernating bats	Once every 3 years	High	High
	Assess number of suitable roost trees and available foraging habitat	Will be determined during development of plan for this assessment - see chap. 4, Wildlife & Fish Standards & Guidelines, Endangered, Threatened and Proposed Species section.	Varies	To be determined	Unknown	Unknown
		Condition of known roost trees	Roost trees	Annually	High	Unknown

The following items will be added to Part 2 of the table in appendix C, under Management Problem #3, Wildlife Habitats, page C.07:

Management Problem	Purpose of Monitoring	Item Monitored	Unit of Measure	Frequency of Measure	Expected Precision	Expected Reliability
#3 Wildlife Habitats	Determine population trends of RFSS to evaluate persistence	Plant Population	Population	Every 5 years, unless species strategy dictates a different schedule	High	Moderate
		Peregrine falcon	Habitat & Population	Annual	High	High
		Bicknell's thrush	Habitat & Population	Annual	Moderate	High
		Common loon	Habitat & Population	Annual	High	High
		Woodland bats	See Indiana bat	See Indiana bat	See Indiana bat	See Indiana bat
		Animals of Stream and Pond Habitat	Habitat	Annual	Moderate	High
	Determine status of RFSS and species of viability concern on Forest	RFSS & additional species of viability concern	Updated list-Forest list & evaluation update	Annual	High	Moderate

Changes Specific to Appendix E

Appendix E will be rewritten to clarify the distinctions between Federally listed species, RFSS, and Species of Concern, in terms of their respective designation authorities and associated program goals and responsibilities.

Because of the dynamic nature of these various protected species lists, the proposed action will remove the lists of "Protected Species" in the Forest Plan (Tables E.01 and E.02). Language will be added to the Forest Plan stating that the lists of federally endangered, threatened, proposed, sensitive, and special concern species will be updated periodically, and will be available on the Region's and GMNF's website, and at GMNF offices. The Forest's most current protected species list will be included in the annual monitoring report. The annual monitoring report will also describe any changes to the list, and the process for evaluating such changes relative to the Forest Plan.

The proposal updates the list of Species of Concern, removing species where there is clear evidence that such species are not known or likely to exist on the Forest, nor appear to have suitable habitat (see also Table 4 in Appendix 2 of the TES EA). The proposal eliminates the Species of Uncertain Occurrence list from appendix E, and replaces it with a standard and guideline in chapter 4 (see standards and guidelines specific to TES Species above).

Changes Specific to Resource Protection Objectives

The following items will be added to the Resource Protection Objectives to replace those under T E & S Species (Forest Plan Table 4.1):

Result	Expected Amount
Threatened, Endangered & Sensitive Species	
Inventory in potential habitat	2,500 acres/year
New occurrences found	Unknown # of occurrences
Biological evaluations prepared	Unknown # of evaluations
Protection through project mitigation	Unknown # occurrences
Conservation Assessments completed	1 species or group/year
Conservation Agreements signed	Unknown # of species

Rationale for the Decision

This amendment is needed to incorporate new information about the impacts of Forest management on TES species on the GMNF. It is also needed to clarify outdated language in and organization of the Forest Plan regarding TES species in general.

The basis for my decision comes from the information in the TES EA, dated January 2001. However, I also relied heavily on the terms and conditions of BO, direction contained in the current Forest Plan, and my knowledge of the NFMA, National Environmental Policy Act (NEPA), ESA, and related regulations and policy. Moreover, our staff of biologists contacted an extensive group of known bat and other species experts, including state biologists, FWS staff, and members of the scientific and academic community. This step was taken to ensure that a thorough analysis, based on any new scientific information, would occur.

My decision also responds to the key issues identified through public comment. The resource effects of each alternative relative to the key issues are documented in Chapter 2 of the TES EA. The key issues identified and used in the analysis were:

- ~~✍~~ Attend to the continual conservation of the Indiana bat by including in the Plan actions to promote the conservation and recovery of the Indiana Bats on the Forest
- ~~✍~~ No warm weather logging of hardwood trees
- ~~✍~~ Evaluate the adequacy of the current plan in terms of protecting species viability

Alternative 3 adopts the mandatory Indiana bat Terms and Conditions of the February 2000 Biological Opinion, making the Forest Plan consistent with the Endangered Species Act. Alternative 3 also requires implementation of additional conservation practices that will

benefit Indiana bat and bat habitat and the habitats of other woodland bat species. These measures will also increase monitoring for bats and bat habitat. Furthermore, we will increase our education and outreach efforts related to Indiana bat conservation.

Alternative 3 does not call for ceasing logging activities in the warm weather; alternatives 4 and 5 were developed to address this concern. However, for the reasons described on the following page, I do not believe ceasing all logging in warm weather is necessary for Indiana bat conservation and protection.

Alternative 3 will also incorporate recommendations for conservation of sensitive species identified in the BE of the Forest Plan for conservation and management of RFSS (USDA 2000c), which was prepared in response to the RFSS update. This programmatic BE concluded that implementation of the Forest Plan was not likely to lead to loss of viability or trend towards federal listing for any of the 87 RFSS known to occur on the Forest; these are the species most at risk for loss of viability on the Forest. The programmatic BE did identify improvements that could be made to the Forest Plan, in particular regarding inventory and monitoring of RFSS, which are incorporated into Alternative 3. By strengthening these areas, we are more likely to become aware of changes in species status and take effective action as needed.

Implementing Alternative 3 will help fulfill our responsibilities to aid in the conservation and recovery of TES species, as described in Forest Service Manual 2670. In addition, the effects from Alternative 3 on other Forest management activities and local economies are minimal to minor (TES EA pages 22-71). None of the effects analyses for each resource area documented significant effects as a result of implementing Alternative 3.

Other Alternatives Considered

The TES EA analyzed eight alternative actions for amending the Forest Plan. Three of these alternatives were dismissed from detailed analysis. The reasons for these dismissals are explained in the TES EA (pp.18-21).

Alternative 1 is the No Action alternative. It represents the conditions present in the existing GMNF Forest Plan, as amended to date, and is the direction currently guiding management of the GMNF. Under this alternative, no amendment would be made at this time, but would be available for consideration in the future. Only those goals, objectives, standards and guidelines currently in the Forest Plan would be used to guide management for Indiana bat and RFSS. The Terms and Conditions defined in the BO (USDI 2000) would not be included in the Forest Plan, and, therefore, would not be required. This alternative is presented purely to satisfy the NEPA requirement for a No Action alternative as a basis for comparison; as it violates the NFMA and the ESA, it would be illegal to implement.

Alternative 2 responds to the purpose and need to incorporate into the Forest Plan new information regarding federally listed threatened and endangered species, and RFSS. This information includes that found in the BA (USDA 1999), the BO (USDI 2000), and all reference material used to develop these documents, and the RFSS list update (USDA 2000a), the programmatic BE of the Forest Plan for RFSS (USDA 2000c), as well as FSM changes

and other supporting documentation used to update the RFSS list. It also responds to the issue of compliance with the BO and the ESA by the GMNF.

Under this alternative, the existing Forest Plan would be amended to incorporate the Terms and Conditions of the BO, which were used to formulate the following general direction or standards and guidelines that would change or clarify current Forest Plan direction (USDI 2000). This alternative also reorganizes and updates direction in the Forest Plan regarding protected species in general, and RFSS species in particular. However, this alternative does not include additional conservation measures identified in the BO, and thus does not address a key issue of Indiana bat conservation.

Alternatives 4 and 5 resemble both alternatives 2 and 3 except that they include a no summer logging and a no summer logging with conservation measures element respectively. To achieve the objective of minimizing take of Indiana bats, these alternatives replace terms and conditions related to summer timber harvesting with cessation of timber harvesting during the non-hibernation period (May 15 through August 30), with the exception that the no harvesting period would be longer if harvesting were to occur near hibernacula. In this case, the no harvesting period would be extended through the month of October.

The difference between Alternatives 4 & 5 is that Alternative 5 would retain the standards and guidelines that would be deleted from Alternative 4. The reason for retaining them under Alternative 5 is that these two standards and guidelines are considered additional conservation measures to protect suitable roost trees.

I did not select either Alternatives 4 or 5 due to the findings of the environmental assessment that any benefits associated with the cessation of summer logging would be so slight as to not even be detectable to Indiana bat recovery across its range, or even in New England or the Northeast (see TES EA, page 34). These findings are also consistent with the Biological Opinion rendered by the FWS, which did not conclude it was necessary to stop all management activities to protect the Indiana bat, but rather emphasizes the importance of reducing the risk of harm to individual Indiana bats through the retention and protection of suitable roost trees (see Appendix 6, response to 16b, 23a, 23b, and 24a), which is accomplished under Alternative 3. The findings of the Biological Opinion have been validated by FWS as recently as August 22, 2001.

Moreover, it was also revealed that implementation of either Alternative 4 or 5 would result in greater potential conflicts between winter recreation use and winter logging activities (TES EA, page 41), which seemed an unnecessary conflict to create in light of the fact that these alternatives would not enhance Indiana bat recovery.

Alternatives 4 and 5 were developed in response to public concern that a cessation of summer harvesting was needed for Indiana bat protection. In order to best address this concern, we needed to create and fully assess these alternatives, so as to reveal all the advantages and disadvantages. Based on the assessment, I find a complete cessation of summer logging to be unduly restrictive and thus do not consider it necessary to select either alternative 4 or 5 for the reasons described above.

Finding of No Significant Impact

I have determined that this amendment is not a major federal action, individually or cumulatively, and will not significantly affect the quality of the human environment. Therefore, an environmental impact statement is not needed. "Significance," as used here, is described in the National Environmental Policy Act, 42 U.S.C. 4321 et seq and is determined based on context and the intensity (severity of impact) of the action. My determination is based on the effects analysis documented in the TES EA, based on the following factors listed in 40 CFR 1508.27:

(a) Context

This amendment changes the Green Mountain National Forest Land and Resource Management Plan. It applies to all Green Mountain National Forest system lands; it does not apply to any private or other public lands. The effects are primarily limited to the programs and management activities of the Green Mountain National Forest. The proposed changes will result in management consistent with practices that have occurred in New England for at least the past 100 years.

The amendment is programmatic in nature and does not authorize site-specific projects. Additional analysis would be required at the site-specific level prior to project implementation.

(b) Intensity:

1. Impacts that may be both beneficial and adverse.

Effects associated with the selected alternative are discussed on pages 22-72 and 91-135 of the TES EA. Effects from Alternative 3 may be both beneficial to some resources and adverse to others. However, as demonstrated in the TES EA, the changes and effects are relatively minor, and so there are no impacts that are directly, indirectly, or cumulatively significant in their effects upon TES species or other resources. It is also important to note that, as for all plan amendments, the proposed adjustments evaluated in this amendment are programmatic in nature (e.g. modifications of standards and guidelines); consequently they have no effects in and of themselves, but only result in effects when implemented as part of a site-specific project. For instance, a new requirement to reserve a tree in and of itself causes no effect because there is no on-the-ground change in the tree being reserved. Only in the context of timber harvest or other tree-removing activity does the retention of the tree from harvest result in some effect (beneficial to wildlife, for example).

2. The degree to which the proposed action affects public health or safety.

Public health and safety will not be adversely affected. The proposed standards specifically exempt reserving trees that would be considered a safety hazard (TES EA, page 10). All other changes would fall within the context of the existing Forest plan and would not result in hazardous situations. For example, the sensitive species changes simply clarify existing direction and provide additional monitoring requirements and protection objectives. None of these activities have hazardous components associated with them.

3. Unique characteristics of the geographic area

There are no significant effects on unique characteristics of the geographic area (Green Mountain National Forest), such as historic or cultural resources, parklands, prime farmlands, floodplains, wetlands, wild and scenic rivers or ecologically critical areas. This is a programmatic amendment to the Forest Plan, and does not propose or authorize any on the ground activities that could affect such unique characteristics. Site-specific analyses and decisions would be made for individual projects. Neither the Heritage Resources analysis (TES EA pages 60-61) nor the Soil, Water, and Air analysis (TES EA pages 58-60) noted any significant effects.

4. The degree to which the effects on the quality of the human environment are likely to be highly controversial.

The effects of the actions specified in Alternative 3 are not highly controversial in nature. That is, there is no substantial dispute among the scientific community as to the size, nature, or effect of the Federal action on the various biological and physical environments due to the proposed activities. Controversy as described here is a dispute among the scientific community about the effects of the proposal, not controversy over the proposal itself. None of the comments received substantially refutes the conclusions reached by the experts, and the Forest is not aware of any additional pertinent scientific literature beyond what has already been examined.

While there is disagreement among some members of the public over the potential for significant effects on the Forest's timber program and local economies, the analysis and data used show that those effects will be minimal (TES EA pages 44-58). There is also disagreement among some members of the public over the potential for significant effects on the MIS program; however, implementation of Alternative 3 will not have any negative impacts on MIS species (TES EA, pages 7-8, 35-38 and Appendix 7 of this DN).

5. The degree to which the possible effects on the human environment are highly uncertain or involve unique or unknown risks.

The effects on the human environment are not highly uncertain, nor do they involve unique or unknown risks. While some comments expressed concern over the uncertainty associated with future management actions, or the lack of knowledge regarding species biology, uncertainty here relates to uncertainty of effects of this action, not uncertainty over the future or certain types of knowledge. There is little uncertainty that additional protection measures will enhance protection of TES species.

In addition, Alternative 3 was developed following a lengthy process, including a review of the available scientific literature and the consultation process with the FWS. Forest Service biologists used a number of scientific studies in preparing a BA evaluating the effects of ongoing and anticipated management practices associated with implementing the Forest Plan on federally listed threatened and endangered species. The FWS used the BA prepared by the Forest, the draft Indiana bat recovery plan, additional scientific studies, and comments from their counterparts in similar situations to develop the Biological Opinion. During this project, we contacted a number of bat specialists to assure we had the most up-to-date scientific information incorporated into the alternatives. Through this extensive review of the scientific

literature and consultation with threatened and endangered species experts, the effects and risks of my decision have been fully examined. Recognizing that scientific information advances with time, monitoring for Indiana bat and other woodland bat species during the Years 1999, 2000 and 2001 reflects continuing efforts to update and validate scientific information.

6. The degree to which the action may establish a precedent for future actions with significant effects or represents a decision in principle about a future consideration.

The amendment makes minor changes to standards and guidelines in the Forest Plan regarding the amount, number and types of reserve trees to be left in harvest units; provides clarification of existing standards and policy for TES species, and adopts additional monitoring requirements and resource protection objectives. These activities do not constitute significant changes from current management. Chapter 3 of the TES EA (pages 22-72 and 91-135) documents that the effects of these activities would be minor and fall within the scope of the effects disclosed in the *Environmental Impact Statement for the Green Mountain National Forest Land and Resource Management Plan*. Similar activities have been implemented on the Forest since 1987 and the programmatic effects of these activities are known. None of the original Forest Plan goals would be changed with this amendment; therefore, it would not eliminate future options for management of the Forest.

7. Whether the action is related to other actions with individually insignificant but cumulatively significant impacts.

This is a programmatic Forest Plan amendment. There are no known significant cumulative effects between this action and other past or reasonably foreseeable actions or projects (TES EA pages 22-72 and 91-135).

8. The degree to which the action may adversely affect eligibility for listing in the National Register of Historic Places or may cause loss or destruction of significant scientific, cultural, or historical resources.

This amendment is programmatic and proposes no on-the-ground activities. Therefore, it does not threaten any significant scientific, cultural or historical resources. Little to no effects on Heritage Resources would occur (TES EA page 60-61). Site-specific analysis and mitigation could be applied to individual projects.

9. The degree to which the action may adversely affect an endangered or threatened species or its critical habitat.

The degree to which this amendment is likely to adversely affect an endangered or threatened species, or its habitat, that has been determined to be critical under the Endangered Species Act of 1973, is not significant. This amendment addresses conservation of the Indiana bat, which is the only endangered species on the Green Mountain National Forest, so effects are beneficial and not adverse. There is no designated critical habitat on the Green Mountain National Forest.

For the Indiana bat, there will be no effects beyond those set forth in the BO, which found that while continued implementation of the Forest Plan could result in the incidental take of these

species, they would not jeopardize the continued existence of the species. Furthermore, the BO found that the risk of incidental take under the current Forest Plan was minimal, and would be reduced even further through implementation of the Terms and Conditions. The findings of the Biological Opinion have been validated by FWS as recently as August 22, 2001.

10. Whether the action threatens a violation of Federal, State, or local law or requirements imposed for the protection of the environment.

This action is in compliance with environmental protection laws and regulations. Analyses in the TES EA show little or no effects to such resources as soils, water quality, air quality, wildlife, heritage resources, etc. Also see below for additional information.

Findings Required by Other Laws and Regulations

Consistency with the Forest Plan

This amendment will not change the Forest Plan goals and objectives originally established in 1987. The proposed changes are minor alterations to or clarification of existing standards (e.g. additional reserve trees in timber harvest units and survey/protection measures for species that occur in isolated locations). The TES EA (pages 22-72 and 92-135) demonstrates that the effects of these changes are minor in scope and do not conflict with other resource area direction.

National Forest Management Act (NFMA)

It is my finding that the actions of this decision comply with the requirements of the National Forest Management Act of 1976 and NFMA implementing regulations in 36 CFR Section 219. This amendment is made in response to new information regarding TES species, which was evaluated through preparation of the BA and BO for Indiana bat, and the programmatic BE for RFSS. These documents evaluate risk to population viability for species known or likely to occur on the GMNF that are of viability concern (i.e. those species most at risk to loss of viability). This evaluation responds directly to the NFMA requirement to maintain viable populations of species within the GMNF (36 CFR 219.19; also USDA 9500-43.a(1)).

I followed the direction found in 16 U.S.C. 1604(f)(4), 36 CFR 219.10(f), FSM 1922.5, and Forest Service Handbook (FSH) 1909.12(5.32) and determined that this is not a significant amendment to the Forest Plan because it does not meet the required definitions of significance found in FSM 1922.5 and FSH 1901.12(5.32). My reasons for making this determination are discussed in detail on pages 4-6 of the TES EA, and further clarified under comment #'s 13, 31-33 in Appendix 6 of this DN.

Endangered Species Act (ESA)

This Forest Plan amendment is made in direct response to new information evaluated in the 1999 BA. The TES EA takes into consideration the formal consultation between GMNF and FWS personnel in order to satisfy all the requirements of the ESA. The 2000 BO included Terms and Conditions that minimize the incidental take of Indiana bat. This amendment incorporates that direction into new standards and guidelines and additional monitoring

elements. Additional standards and monitoring included in this decision further the recovery of the Indiana bat beyond just the minimization of incidental take. The FWS has reviewed Alternative 3 and concurs with our determination that this decision would be consistent with ESA requirements.

Other Relevant Laws

I have considered other relevant laws and regulations that this amendment may affect. These include, but are not limited to, the Multiple Use-Sustained Yield Act of 1960, the Forest and Rangeland Renewable Resources Planning Act of 1974, the Clean Air Act, the Clean Water Act, and the National Historic Preservation Act. I have fully considered the effects of the amendment on the public, as well as the public's concerns/issues brought forward during the three comment periods and feel that these concerns/issues are adequately addressed in the TES EA, its appendices and in this Decision Notice. I have determined that my decision to approve this amendment meets all applicable laws, regulations, and land policies, as well as Forest Service direction and guidance as outlined in the Forest Service Manuals and Handbooks.

Appeal Rights

This decision is subject to appeal pursuant to 36 CFR 217. The last day to appeal this decision is 45 days after a legal notice for this decision is published in the *Rutland Herald*. In order to be considered, a written Notice of Appeal must be postmarked or received within 45 days of the legal notice publication, at the following address:

USDA, Forest Service, Eastern Region
ATTN: Appeals Reviewing Officer
10 West Wisconsin Avenue, Suite 500
Milwaukee, WI 53203

A Notice of Appeal must meet the requirements of 36 CFR 217.9, as listed below:

- ~~/s/~~ List the name, address, and telephone number of the appellant;
- ~~/s/~~ Identify the decision about which the appellant objects;
- ~~/s/~~ Identify the document in which the decision is contained by title and subject, date of the decision, and the name and title of the Deciding Officer;
- ~~/s/~~ Identify specifically that portion of the decision or decision document to which the appellant objects;
- ~~/s/~~ State the reasons for objecting, including issues of fact, law, regulation or policy, and, if applicable, specifically how the decision violates law, regulation, or policy; and
- ~~/s/~~ Identify the specific change or changes in the decision that the appellant seeks.

Implementation

If no appeal is received, implementation of this decision may occur on, but not before, 5 business days from the close of the appeal filing period. If an appeal is received, implementation may not occur for 15 days following the date of appeal disposition.

For more information on this decision, contact Pat D'Andrea, Green Mountain National Forest, 1007 Route 7 South, Middlebury, VT 05753. Telephone: 802-388-4362.

PAUL K. BREWSTER
Forest Supervisor

DATE

Additional Appendices

to the

***Environmental Assessment for the Proposed Amendment to the Green
Mountain National Forest Land and Resource Management Plan for
Threatened, Endangered, and Sensitive Species***

